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of the Park et al. U.S. Patent No. 6,159,187 (claim 9) and from the Tovey patent in view of the Griep U.S. Patent No. 5,163,431 (claim 10), as these rejections may be attempted to be applied against the new claims 11-22, are respectfully traversed.

First of all, in support of this traverse, claim 11 is directed to a narrow combination of elements including some elements known in the prior art. However, the specific combination claimed is not disclosed in or obvious from the references cited.

The same can be said for the combination claimed in claim 14, the combination claimed in claim 17, the combination claimed in claim 19 and the combination claimed in claim 21.

An important feature of the present invention is to provide a separate plastic thermoresponsive distal tip at the end of a straight or tapered distal portion of a tubular body defining a catheter. None of the art teaches such a distal tip.

Another important feature of the present invention is to coat the tubular body defining a catheter with a jacket of the plastic thermoresponsive material. Again, none of the teaches such a jacket

Further, the references are directed to structures that are significantly different from applicant's catheter.

For example Tovey is directed to an ENDOSCOPIC SURGICAL DEVICE and not to a catheter as defined now even more clearly in claims 11, 14, 17, 19 and 21.

Bley et al. is directed to a THERMALLY SOFTENING STYLET. A stylet is not a catheter. However, it is noted that claim 9 calls for the catheter which receives the stylet to also soften when exposed to the predetermined temperature. But again the catheter is not a --distal tip--.

Applicant acknowledges that braided reinforcement of a catheter is old in the art as explained in Park et al. Note that this feature is only claimed in new sub-claims 12 and 16, 18 20 and 22.

All that Frantzen teaches is that a "cutter head assembly 12 has a cylindrical housing 17 formed of shape memory/pseudoelastic alloy" A housing is not a jacket and an alloy, e.g., sold under the trademark Nitinol, is not a plastic thermoresponsive material.

Griep teaches a separate tapered tip. Griep does not teach a tapered distal

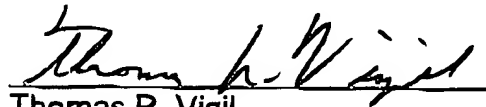
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portion to which a separate distal tip is attached.

Applicant submits that upon reconsideration of the new claims 11-22 in conjunction with the above remarks it will be clear that the new claims are clear of the art and otherwise in condition for allowance. An early and favorable action to that end is requested.

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Respectfully submitted,



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New claims faxed to the Office on April 19, 2002 in USSN 09/533,493.

11. A catheter assembly for use as one of an intravascular catheter, a coronary catheter, a drainage catheter, a chemotherapy delivery catheter or a neuro-procedure catheter and comprising a tubular body having a proximal portion and a distal portion and a separate distal tip which is coupled to an outer end of said distal portion and which is made of a plastic thermoresponsive material which is harder at temperatures below a critical temperature of approximately 31 degrees C and softer at temperatures above said critical temperature, said distal tip having a Shore hardness of 72-75 D at temperatures below said critical temperature for facilitating the pushing of said catheter into an introducing catheter and having a Shore hardness of 32-35 D at temperatures above said critical temperature, said distal tip being made of a thermoresponsive polyurethane and having a radiopaque material therein, and said tubular body being coated with a jacket made of said plastic thermoresponsive material.

12. The catheter assembly of claim 11 wherein said tubular body is a wire braided body comprising an inner tubular extrusion, a wire braid on the outer surface of said inner tubular extrusion and an outer tubular extrusion extruded over said wire braid.

13. The catheter assembly of claim 11 wherein said distal portion of said tubular body is tapered and said distal tip is welded on or molded on said tapered distal portion.

14. A catheter assembly for use as one of an intravascular catheter, a coronary catheter, a drainage catheter, a chemotherapy delivery catheter or a neuro-procedure catheter and comprising a tubular body having a proximal portion and a distal portion and a separate distal tip which is coupled to an outer end of said distal portion and which is made of a plastic thermoresponsive material which is harder at temperatures below a critical temperature of approximately 31 degrees C and softer at temperatures above said critical temperature, said distal tip having a Shore hardness of 72-75 D at temperatures below said critical temperature for facilitating the pushing of said catheter into an introducing catheter and having a

Shore hardness of 32-35 D at temperatures above said critical temperature, said distal tip being made of a thermoresponsive polyurethane and having a radiopaque material therein, said distal portion of said tubular body being tapered and said distal tip being welded on or molded on said tapered distal portion of said tubular body.

15. The catheter claim assembly of claim 14 wherein said tubular body is coated with a jacket made of said thermoresponsive material.

16. The catheter assembly of claim 14 wherein said tubular body is a wire braided body comprising an inner tubular extrusion, a wire braid on the outer surface of said inner tubular extrusion and an outer tubular extrusion extruded over said wire braid.

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17. A catheter assembly for use as one of an intravascular catheter, a coronary catheter, a drainage catheter, a chemotherapy delivery catheter or a neuro-procedure catheter and comprising a tubular body having a proximal portion and a distal portion and a separate distal tip which is coupled to an outer end of said distal portion and which is made of a plastic thermoresponsive material which is harder at temperatures below a critical predetermined temperature and softer at temperatures above said critical temperature and said tubular body being coated with a jacket made of said plastic thermoresponsive material.

18. The catheter assembly of claim 17 wherein said tubular body is a wire braided body comprising an inner tubular extrusion, a wire braid on the outer surface of said inner tubular extrusion and an outer tubular extrusion extruded over said wire braid.

19. A catheter assembly for use as one of an intravascular catheter, a coronary catheter, a drainage catheter, a chemotherapy delivery catheter or a neuro-procedure catheter and comprising a tubular body having a proximal portion and a distal portion and a separate distal tip which is coupled to an outer end of said distal portion and which is made of a plastic thermoresponsive material which

is harder at temperatures below a critical predetermined temperature and softer at temperatures above said critical temperature.

20. The catheter assembly of claim 14 wherein said tubular body is a wire braided body comprising an inner tubular extrusion, a wire braid on the outer surface of said inner tubular extrusion and an outer tubular extrusion extruded over said wire braid.

21. A catheter assembly for use as one of an intravascular catheter, a coronary catheter, a drainage catheter, a chemotherapy delivery catheter or a neuro-procedure catheter and comprising a tubular body having a proximal portion and a distal portion and a separate distal tip which is coupled to an outer end of said distal portion and said tubular body being coated with a jacket made of a plastic thermoresponsive material which is harder at temperatures below a critical predetermined temperature and softer at temperatures above said critical temperature.

22. The catheter assembly of claim 21 wherein said tubular body is a wire braided body comprising an inner tubular extrusion, a wire braid on the outer surface of said inner tubular extrusion and an outer tubular extrusion extruded over said wire braid.